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22 July 1964

MEMORANDUM FOR: Deputy Director for Science and Technology
Assistant Director for Special Activities
Director of Communications
Chief, Plans and Programs Staff, DD/S&T
Chief, Analysis Staff, DD/S&T

SUBJECT: Design Review Board

I believe that a degree of efficiency can be introduced in our technical operations by following a flexible but comprehensive procedure to assure that equipment development remains responsive to operational requirements. Timely review by competent engineers and scientists not directly charged with development of equipment can assist in assuring an objective look at the progress of development programs. The attached procedure, which we have adopted in OEL, may be useful to you in your organization.

GEORGE C. MILLER
Assistant Director for ELINT
Directorate of
Science and Technology

Attachment:
OEL Notice 1-2

Distribution:
Orig - DD/S&T w/att
1 - ea. Addressee w/att
1 - Mr. Parengoski, OSA
1 - EXO/EL
1 - ea. OEL Division Chief
1 - OEL Registry
✓ 1 - RCS Chrono

OAD [redacted] js/6911 (22 July 64)

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OFFICE OF ELINT

ORGANIZATION

NOTICE
OEL 1-2
22 June 1964

DESIGN REVIEW BOARD

1. The Design Review Board procedure is established to provide a simple, uniform process by which OEL programs may be scrutinized from time to time. Since the scope of OEL programs is broad, the review procedure is designed to be very flexible in order to assure its effectiveness. The procedure is equally adaptable for reviews involving only a few people for a few hours in the case of simple projects as it is for reviewing complex projects which may require several days and the use of larger committees.

2. While comprehensive in scope, it is intended to be helpful rather than burdensome, and the frequency and depth of the review will be largely dictated by the complexity of the equipment or system involved.

3. Initiation of this procedure will be as of this date. While design reviews of all equipment under development by OEL cannot be undertaken simultaneously, each Project Officer should note his responsibilities as delineated in the attachment and take action to schedule appropriate reviews at an early date.

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GEORGE C. MILLER

Assistant Director for ELINT

Attachment:
Design Review Board Procedure

Distribution:
All Divisions

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TITLE: Design Review Board Procedure

PURPOSE: To present the procedures for instituting and conducting formal Design Reviews

SCOPE: The provisions and instructions contained herein extend to all organization segments of OEL

GENERAL:

Nature: 1. The Design Review Board (hereinafter abbreviated DRB) has been instituted to insure maximum integrity and usefulness of equipment for which OEL is responsible,

Operating Method: 2. The operating method of the DRB is as follows:

2.1 A DRB schedule will be established by the Project Officer when an equipment development program/contract is initiated, unless specific approval is obtained from the AD/OEL to void this requirement.

2.2 The DAD/S&D, with the approval of the AD/OEL, will select the DRB Chairman.

2.3 The DRB Chairman will select the DRB Members, make the arrangements for the meeting, and conduct the review.

2.4 Within one week following conclusion of the review meeting(s), the DRB and the Project personnel will determine action to be taken on the DRB recommendations and will issue a memorandum stating the action.

Within three weeks following issue date of the memorandum, a final report will be issued.

2.5 Recommendations to be implemented will be handled through existing channels by the Project Officer.

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PROCEDURE:

Summary:

1. Throughout the normal life cycle of equipment, there are times when a review of a particular aspect of the work (or the entire product) by an objective group of personnel and specialists in the particular field would be timely and beneficial. In addition to providing a fresh look at the project at a time that improvements can be readily implemented, the review serves the secondary purpose of increasing the technical background of the participants, and making actual experience available to other projects. A list of salient monitoring points, together with some of the factors to be considered in such reviews, are presented in Appendix A (attached). References 1, 2, 3, 4, 9, 10, and 20 in the Bibliography (attached) should prove particularly useful to review board members as sources for additional background.

In scheduling reviews, consideration must be given to the stage of product development (i.e. a period when development has progressed far enough to justify a review, and still be in a stage wherein recommended changes can be expeditiously incorporated).

In addition to the accepted review points indicated in Appendix A, other types of product reviews may be instituted as the need becomes apparent. These points include, but are not necessarily restricted to:

- 1.1 Product Testing Reviews
- 1.2 Product Problem Reviews
- 1.3 Production Cost Reviews
- 1.4 Specification Reviews

DRB

Initiation:

2. Each Project Officer in S&D/OEL cognizant of equipment development is responsible for initiating a Design Review activity. This responsibility cannot be delegated. The type of reviews required, when and where such reviews will be held and other germane aspects relative to the effective use of this evaluation technique are all part of this basic responsibility.

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In implementation of the above philosophy, each Project Officer will review the current position with respect to scheduling project reviews.

It is anticipated that each project will include in its schedule one or more formal reviews for major subsystems or systems.

Design Review Implementation: 3. Reviews will be initiated as follows:

3.1 Organization:

DAD/S&D will select a Review Board Chairman who will normally be selected from the DD/S&T organization. The Chairman, together with the designated project representative, shall establish mutually agreeable objectives and shall adopt a schedule and an agenda for the review. An informal memorandum shall be published formalizing the DRB meeting, and indicating the following:

- 3.1.1 The purpose and scope of the review;
- 3.1.2 The schedule of the review;
- 3.1.3 The location of the meeting;
- 3.1.4 All anticipated expenses of the review, including consultant fees, trips, man-hours, etc., with the appropriate project charge number;
- 3.1.5 The names of appointed meeting members;
- 3.1.6 The reports, prints, specifications, and other required documents;
- 3.1.7 The parts, components, subassemblies, assemblies, and other required hardware;
- 3.1.8 Requirements for consultants, vendor representatives, subcontractor representatives and military representatives shall be outlined;
- 3.1.9 A schedule for the delivery of documents and hardware before the meeting, if required;
- 3.1.10 Conditions, constraints, contingencies, or limitations bearing on the review;

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3.1.11 Listing of applicable references;

3.1.12 Report distribution

Both the Project Officer and the DAD/S&D shall sign this memorandum indicating agreement with its planning and objectives.

3.2 Membership:

In addition to the Chairman, the DRB shall include, but is not necessarily limited to, representation as follows:

- | <u>Representative</u> | <u>Appointed by</u> |
|---|---------------------|
| 3.2.1 At least one member from the Project Officer's group, responsible for the presentation | Project Officer |
| 3.2.2 Technical specialist(s) having required skills; other divisions or projects of the Agency having such skills may be invited as consultants. | |
| 3.2.3 Consultants from outside agencies may be invited if appropriate. | |
| 3.2.4 Vendor and subcontractor representatives may be invited if appropriate. | |
| 3.2.5 Military personnel may be invited when appropriate. It is important that the representatives appointed be technically qualified, but not so closely related to the product that an open viewpoint is precluded. | |

The Chairman will assure that all members of the DRB are properly notified and given adequate notice of the DRB meeting.

3.3 Schedule:

The DRB meeting(s) will be scheduled far enough in advance to permit adequate planning, thorough study of applicable documents, and ample time for consultants, subcontractors, and vendors to arrange their trips.

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3.4 DRB Meeting Procedure:

The Chairman of the DRB shall formulate an agenda encompassing all of the agenda objectives and distribute it in advance of the meeting.

It is the responsibility of the Chairman to keep the meeting on schedule and to either act as, or appoint, a secretary to keep faithful records of the discussion and decisions. The secretary should list the names, addresses, and telephone extensions of the DRB members, and where possible, request that alternates be named.

The Chairman shall conduct the review to fulfill the specified objectives within the allocated time. If completion within the scheduled period is impossible, the meeting may be continued for an additional specified period with the oral approval of the DAD/S&D. The Chairman may recommend continuing action to satisfactorily complete the DRB business.

3.5 Critique:

At the conclusion of the review presentations, and within two working days, the DRB will formulate in writing its recommendations for presentation to be within the scope established by the initiating memorandum. The DRB members and the Project Officer will discuss and resolve the recommendations into the following categories within three working days:

3.5.1 To be implemented with approximate dates or effectivities;

3.5.2 Not to be implemented;

3.5.3 To be referred to the DAD/S&D and/or AD/OEL for resolution. The resolution results will be published by memorandum to the DAD/S&D. Items to be implemented will be issued by the Project Officer through normal channels.

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3.6 Report:

3.6.1 A formal report will be prepared by the DRB, covering the salient points of the meeting, recommendations and resolutions. Appendix B (attached) shall be used as a guide in preparing the report. The following shall be included.

3.6.1.1 Title Page - should include the title, date, signatures, and titles of each of the DRB representatives. Signatures indicate acceptance of the report. Dissenting or alternate viewpoints may be included in the discussion section or in appendices.

3.6.1.2 Foreward - should note the project, contract number, the Engineering Directives establishing the review, etc.

3.6.1.3 Table of Contents

3.6.1.4 Summary

3.6.1.5 Introduction

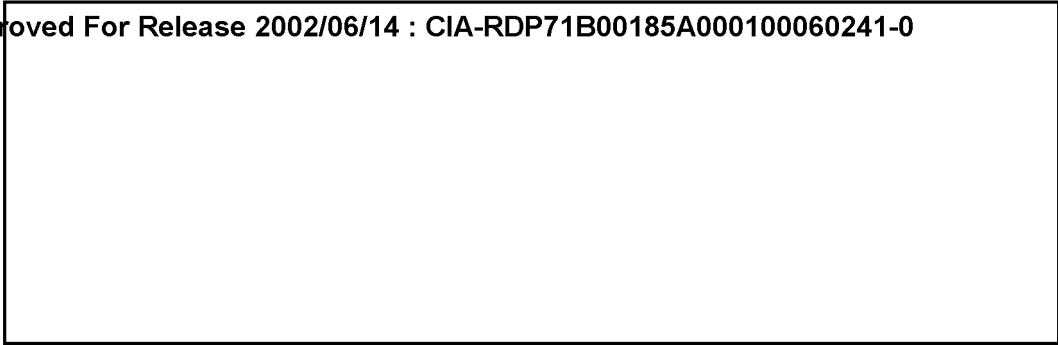
3.6.1.6 Discussion - the body should include all pertinent board discussions, resolutions, findings, recommendations, and conclusions. Other data, such as equations, test data, photographs, graphs, and charts may be included where deemed necessary for report completeness. Generally, detailed mathematical formulas and calculations should be found in the appendix.

3.6.1.7 Conclusions

3.6.1.8 Recommendations

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